

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/004573

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C09K11/02 C09K11/81

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C09K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, COMPENDEX, INSPEC, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category <sup>a</sup>	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 101 31 173 A (ITN NANOVATION GMBH) 16 January 2003 (2003-01-16) paragraph '0013! - paragraph '0017!; claims 1,6	1,3-5, 19-22
X	US 2003/032192 A1 (MEYSAMY HEIKE ET AL) 13 February 2003 (2003-02-13) paragraph '0086! paragraph '0181! - paragraph '0189!; claim 22	1-4, 19-22

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

## \* Special categories of cited documents :

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Lehnert, A

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	HAASE M ET AL: "Synthesis and properties of colloidal lanthanide-doped nanocrystals" JOURNAL OF ALLOYS AND COMPOUNDS, ELSEVIER SEQUOIA, LAUSANNE, CH, vol. 303-304, May 2000 (2000-05), pages 191-197, XP004204357 ISSN: 0925-8388 the whole document -----	1-4, 19-22
X	US 2001/024088 A1 (BECHTEL HANS-HELMUT ET AL) 27 September 2001 (2001-09-27) claim 11 -----	1,2,4, 19,21,22
A	FARMER S C ET AL: "PHOTOLUMINESCENT POLYMER/QUANTUM DOT COMPOSITE NANOPARTICLES" CHEMISTRY OF MATERIALS, AMERICAN CHEMICAL SOCIETY, WASHINGTON, US, vol. 13, no. 11, November 2001 (2001-11), pages 3920-3926, XP001108765 ISSN: 0897-4756 the whole document -----	1-22
A	US 2003/017264 A1 (TREADWAY JOSEPH A ET AL) 23 January 2003 (2003-01-23) claims; example 4 -----	1-22
A	US 6 207 229 B1 (RODRIGUEZ-VIEJO JAVIER ET AL) 27 March 2001 (2001-03-27) example 3 -----	1-22
A	WO 00/38282 A (UNIV MICHIGAN ;HINKLIN THOMAS (US); LAINE RICHARD M (US); RAND STE) 29 June 2000 (2000-06-29) the whole document -----	1-22
A	EP 1 076 084 A (PATRA PATENT TREUHAND) 14 February 2001 (2001-02-14) claims 1-4 -----	1-22

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No  
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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
DE 10131173	A	16-01-2003	DE	10131173 A1	16-01-2003
US 2003032192	A1	13-02-2003	WO AU CA CN WO DE EP JP	0220695 A1 1003602 A 2388094 A1 1388827 T 0220696 A1 10111321 A1 1232226 A1 2004508215 T	14-03-2002 22-03-2002 14-03-2002 01-01-2003 14-03-2002 23-05-2002 21-08-2002 18-03-2004
US 2001024088	A1	27-09-2001	DE EP JP	10009915 A1 1132938 A2 2001283740 A	27-09-2001 12-09-2001 12-10-2001
US 2003017264	A1	23-01-2003	CA EP WO	2453450 A1 1409240 A2 03092043 A2	06-11-2003 21-04-2004 06-11-2003
US 6207229	B1	27-03-2001	US CA EP JP WO US US	6322901 B1 2309967 A1 1034571 A1 2001523758 T 9926299 A1 6607829 B1 2004033359 A1	27-11-2001 27-05-1999 13-09-2000 27-11-2001 27-05-1999 19-08-2003 19-02-2004
WO 0038282	A	29-06-2000	AU EP JP WO US	3995700 A 1135838 A2 2002533291 T 0038282 A2 6656588 B1	12-07-2000 26-09-2001 08-10-2002 29-06-2000 02-12-2003
EP 1076084	A	14-02-2001	DE CA CA CN CZ WO WO DE DE DE EP EP EP EP HK HU JP JP JP JP US US	4311197 A1 2155340 A1 2159906 A1 1120873 A ,B 9502421 A3 9423442 A1 9422975 A1 59405921 D1 59410172 D1 59410196 D1 1078972 A2 1076084 A2 0733266 A1 0738311 A1 1008759 A1 71766 A2 3298886 B2 8508363 T 8508307 T 2002216985 A 5604410 A 5714835 A	06-10-1994 13-10-1994 13-10-1994 17-04-1996 17-07-1996 13-10-1994 13-10-1994 10-06-1998 26-09-2002 14-11-2002 28-02-2001 14-02-2001 25-09-1996 23-10-1996 14-05-1999 29-01-1996 08-07-2002 03-09-1996 03-09-1996 02-08-2002 18-02-1997 03-02-1998